

IN THE CLAIMS

Please amend the claims as follows:

1-10 (Cancelled).

11. (Currently Amended) A turbo decoder operative to use a soft output Viterbi algorithm, said turbo decoder comprising:

a first decoding unit;

a second decoding unit, wherein the first decoding unit and second decoding unit are arranged according to a parallel or serial scheme; and

~~a number of decoding units; and~~

~~a number of normalization units each~~ at least a first normalization unit located at an output side of the first decoding unit ~~a respective decoding unit,~~

~~wherein only a subset of the plurality of decoding units has a normalization unit associated therewith at its output side, and~~

wherein ~~the~~ a number of normalization units is smaller than the number of decoding units.

12. (Currently Amended) The turbo decoder according to claim 11, wherein:

[[a]] the second decoding unit does not have ~~having a respective~~ normalization unit associated therewith at its output side, and is provided with data representative of a normalized output from the at least a first normalization unit located at an output side of the first decoding unit ~~normalization unit of a preceding decoding unit of the subset.~~

13. (Canceled)

14. (Previously Presented) A mobile communications device comprising a turbo decoder according to claim 11.

15. (Currently Amended) A turbo decoding method operative to use a soft output Viterbi algorithm, said turbo decoding method comprising the steps of:

using a ~~number~~ plurality of decoding units, wherein said plurality of decoding units are arranged according to a parallel or serial scheme;

using a ~~number~~ at least a first normalization unit at an output of at least a first subset of the plurality of decoding units ~~of normalizing units;~~ and

normalizing data obtained from ~~use of~~ each of the plurality of decoding units with a respective normalization factor,

wherein ~~the~~ data obtained from use of only a first subset of the plurality of decoding units are normalized with a normalization factor variable during operation and the data obtained from use of ~~the other one or ones~~ a second subset of the plurality of decoding units are normalized with a time constant normalization factor, ~~and~~

~~wherein the number of normalization units is smaller than the number of decoding units.~~

16. (Previously Presented) The turbo decoding method according to claim 15, wherein the time constant normalization factor is equal to one.

17. (Canceled)

18. (Currently Amended) The turbo decoding method according to claim 15,

wherein the plurality of decoding units include a first decoding unit which corresponds to the first subset of the plurality of decoding units and a second decoding unit which corresponds to the second subset of the plurality of decoding units, and

wherein ~~the~~ data obtained from use of the first decoding unit is normalized with the normalization factor variable during operation and ~~the~~ data obtained from use of the second decoding unit is normalized with the time constant normalization factor.

19. (Currently Amended) The turbo decoding method according to claim 15, wherein the respective normalization factor ~~or factors are~~ is calculated on a ~~the~~ basis of means and variance of extrinsic information produced by an associated decoding

20. (Previously Presented) The turbo decoding method according to claim 15, wherein the plurality of decoding units are arranged in a parallel manner to enable the method to be performed as a parallel concatenated scheme.

21. (Currently Amended) A turbo decoder operative to use a soft output Viterbi algorithm, said turbo decoder comprising:

a first decoding unit;

a second decoding unit, wherein the first decoding unit and second decoding unit are arranged according to a parallel or serial scheme; and

~~a number of decoding units; and~~

a ~~number~~ plurality of normalization units, at least one of the plurality of normalization units each located at an output side of the first decoding unit,

wherein said first decoding unit is used a plurality of times, each of said plurality of times generating an output, and

wherein only a subset of said outputs is normalized with the at least one of said plurality of normalization units, and

wherein the number of the plurality of normalization units is smaller than the number of the plurality of decoding units.

22. (Currently Amended) The turbo decoder according to claim 21, wherein the second [[a]] decoding unit does not having a respective normalization unit associated therewith at its output side is provided with data representative of a normalized output from the at least one of said plurality of the normalization units ~~unit of a preceding decoding unit of the subset.~~

23. (Currently Amended) The turbo decoder according to claim 21, wherein the ~~plurality of generated outputs from said~~ first decoding unit includes a first output and a second output, in which only the first output has the at least one of the plurality of a respective normalization units ~~unit associated therewith~~ at its output side.

24. (Currently Amended) A mobile communications device comprising a turbo decoder according to claim 21.

25-30. (Canceled)